



**DEVELOPMENT OF THE CARBON MONITORING PLAN FOR OCEANIUM'S MANGROVE RESTORATION PROJECT AND SUPPORT FOR THE DEVELOPMENT OF THE SOCIAL AND ENVIRONMENTAL MONITORING PLAN**

**Ref.**  
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Expert(s)	Country	Volume (md)	Amount* (€)	Beneficiary	Funding	Start date	End date	Partner(s)	Reference
Maden Le Crom	Senegal	35	34,572 <i>*For the referred expert, within ONFI</i>	Oceanium	Danone	Apr. 2011	Oct. 2011	n/a	<a href="mailto:jeangoepp@nebeday.org">jeangoepp@nebeday.org</a> +221 779 39 70 70

Detailed description of the project	Services provided
<p>In 2008 and 2009, the mangrove restoration project of the Senegalese NGO Oceanium planted more than 40 million mangrove seedlings in the Saloum Delta and along the Casamance River (Senegal).</p> <p>This project, like others across the world, was partially funded by the “Danone Fund for Nature” which aims at offsetting greenhouse gas (GHG) emissions from Danone’s activities.</p> <p>To generate Kyoto carbon units, a Project Design Document (PDD) was drafted in the format required by the Clean Development Mechanism (CDM) of the Kyoto Protocol.</p> <p>In addition to this and in order to ensure the high quality of the project, Danone wanted to develop:</p> <ul style="list-style-type: none"> <li>• A monitoring plan for carbon removals, adapted to the project and its specific technical parameters;</li> <li>• A monitoring plan of the environmental and social impacts of the project, as well as guidelines to internalize its implementation.</li> </ul>	<p>1/ Monitoring plan for carbon removals: This was drafted following an assessment of future changes in carbon stocks, on the basis of field data. It includes:</p> <ul style="list-style-type: none"> <li>• Organization and responsibilities for monitoring;</li> <li>• Timeframe;</li> <li>• Development of procedures and protocols: stratification, pre-inventory, sampling, preparation of inventory campaigns and staff training, calibration, maintenance and storage of equipment, installation of experimental plots, measurements in the plots as well as the taking, analysis, control and storage of data;</li> <li>• Development of instruction sheets for field activities (visual memory aids);</li> <li>• Development of ad hoc field forms;</li> <li>• Procedures for measuring effectiveness and insuring continuous improvement.</li> </ul> <p>Following this, two two-day courses containing five training modules (stratification, sampling, installation of plots, measurements, data processing) were conducted. The courses brought together the Oceanium project team, villagers and agents of the Ministry of the Environment. It involved practical applications of the protocols, instruction sheets and field forms as applied to mangroves;</p> <p>2/ Monitoring plan of social and environmental impacts. The mentioned expert oversaw and supervised the mission carried out in this regard.</p>